

September 4, 1998

Dan Olson WDEQ-Air Quality Division 122 W. 25th St. Chevenne, WY 82002

Dear Dan:

RE: Particulate Stack Tests on AQD #s 2a, 18, 19, 50, and 53.

Enclosed you will find four particulate stack test reports CAE Project Numbers 7920, 7928-2, 7928-3, and 7928-5. These tests were conducted during the spring of 1997 to help determine particulate emissions from our existing boilers (AQD #18 and #19) and baghouses. Testing was done on one trona ore baghouse (Ore Crusher AQD #2a), and two soda ash baghouses (Dryer Area Housekeeping AQD #50 and Silo Reclaim #2 AQD #53).

The baghouses (AQD #2a, #50, and #53) were tested per Reference Method 5/202, adding the Method 5 front half and the Method 202 back half inorganic. Reference Method 201A was conducted on AQD #2a to attempt to determine the percent of particulate greater than 10 μm for dispersion modeling purposes. Due to the low grain loading, little particulate matter was collected, therefore the Method 201A results are suspect. Furthermore, after determining the mass of the Method 5 front half particulate, the samples were to be evaluated under a scanning electron microscope. Again, due to the low grain loading, results were not conclusive.

The boilers (AQD #18 and #19) are subject to Subpart D of 40 CFR Part 60. Per 40 CFR 60.46(b)(2), "Method 5 shall be used to determine particulate matter concentrations (C) at affected facilities...". Although Method 5/202 was conducted on the boilers, only Method 5 results should be considered to be "actual" particulate emissions and used in determining compliance.

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The results of the testing are summarized below, with a comparison to the permit limit per CT-1347:

AQD#	Date	PM ₁₀ Actual (PPH)	PM ₁₀ Permit (PPH)	% of Permit	Gr/dscf
18	Mar '97	2.3	5.0	46	0.007
19	Mar '97	1.6	5.0	32	0.006
2a	Apr '97	0.19	1.6	12	0.001
50	Apr '97	0.26	0.7	37	0.002
53	Apr '97	0.15	0.45	33	0.002

Solvay Minerals requests that these particulate emission rates be used in future emissions inventory and other documents, as appropriate.

If you have any questions concerning these stack test results, please contact me at (307) 872-6571.

Sincerely,

Dolly A. Potter

Environmental Engineer

Enclosures

cc: Lee Gribovicz w/ enclosures